



Approval #

980019-U (Replaces 950053-U  
& 920045-U)

Safety & Buildings Division  
201 West Washington Avenue  
P.O. Box 2689  
Madison, WI 53701-2689

## Wisconsin Material Approval

Material

Cylindrical and Rectangular Secondary Containment Aboveground Tanks &  
FIREGUARD® Insulated Secondary Containment Aboveground Tank

Manufacturer

USEMCO Inc.  
1602 Rezin Road  
PO Box 583  
Tomah, WI 54660

---

### SCOPE OF EVALUATION

The Cylindrical or Rectangular Secondary Containment Aboveground Tank, with or without skids or saddles and the FIREGUARD® Insulated Secondary Containment Aboveground Tank with or without saddles were evaluated for the storage of flammable and combustible liquids in accordance with **ss. ILHR 10.345 (1)** and **ILHR 10.415 (7)(b)** and for projectile resistance in accordance with **s. ILHR 10.415 (7)(b)**. The FIREGUARD® tank was also evaluated for fire resistance in accordance with **s. ILHR 10.415 (4)(b)** of the Wisconsin Administrative Flammable and Combustible Liquids Code.

### DESCRIPTION AND USE

#### Secondary Containment Tanks

USEMCO's Secondary Containment Tanks are manufactured with capacities ranging from 100 to 50,000 gallons.

For the cylindrical tanks, the monitoring well is constructed of 2-inch pipe which opens to the interstitial space at the bottom. It is threaded at the top for the required interstitial monitoring. For easier field installation of monitoring equipment, a 2-inch plugged coupling is also acceptable installed 3 inches from the tank bottom. A sight glass is then field-installed in the coupling.

For the rectangular tank, one end of the secondary containment shell is extended 8 inches beyond the primary shell. A 2-inch monitoring opening is provided in the top of this extension.

#### FIREGUARD® Insulated Secondary Containment Tank

These tanks are thermally insulated double wall storage tanks. The interstitial space between the two steel walls is filled with a lightweight concrete and insulation mixture to provide the thermal resistance.

#### TESTS AND RESULTS

##### Secondary Containment Tank

The inner tank and secondary containment are tested and listed by UL in accordance with standard UL 142. The skid and saddle designs submitted to the department have UL approval.

#### FIREGUARD® Insulated Secondary Containment Tank

The inner tank, secondary containment and saddle design have been tested and listed in accordance with UL 142.

The insulated tank system has been listed in accordance with UL 2085 for insulated aboveground tanks.

#### LIMITATIONS OF APPROVAL

##### All Tanks

The Secondary Containment Tanks are approved for compliance with the secondary containment requirements of **ss. ILHR 10.345 (1)** and **ILHR 10.415 (7)(b)** and may be used without a dike, except in the case of public-access waste oil collection. Tanks for public-access waste oil collection shall be provided with a dike in accordance with **s. ILHR 10.33**.

Tanks up to 10,000 gallons may be used for vehicle fueling in accordance with **s. ILHR 10.415**.

The interstitial space shall be monitored for leaks. The monitor must be capable of detecting a leak from anywhere in the inner tank.

Compartmentalized tanks shall be constructed with a double bulkhead in accordance with UL Standard 142. This interstitial space between compartments shall be monitored for leaks.

A spill container shall be provided at the fill opening in accordance with **s. ILHR 10.415 (12)(a)**.

Separate vehicle collision protection shall be provided by a barrier that meets the design requirements specified in **s. ILHR 10.415 (8)(a)**.

No attachments shall be made to the tank which violate or void the UL listing.

The tank shall be installed to allow full visual inspection of the secondary containment system.

The installer shall be certified by the department in accordance with **ch. Comm 5**.

This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

#### Secondary Containment Tank

All tanks, regardless of capacity, shall have a minimum total wall thickness (heads and shells) comprised of 1/4-inch and 7 gauge A36 steel. This is deemed sufficient to meet the projectile protection requirement of **s. ILHR 10.415 (7)(b)**.

Double wall tanks with lesser wall thicknesses may be used inside a building without a dike subject to the requirements of **ss. ILHR 10.335 (2)** and NFPA 30, 30A or 31.

If the field-installed sight glass for interstitial monitoring is used, it shall be installed prior to the interstitial tightness test.

#### FIREGUARD® Insulated Secondary Containment Tank

The FIREGUARD® tank with 6-inches of insulation meets the requirements for 4-hour fire exposure and may be sited using the reduced setbacks under **s. ILHR 10.415 (4)(b)1**.

The FIREGUARD® tank meets the ballistics protection requirement of **s. ILHR 10.415 (7)(b)**.

#### DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by; \_\_\_\_\_

Approval Date: \_\_\_\_\_ By: \_\_\_\_\_  
Duane Hubeler  
Mechanical Code Consultant  
Office of Division Codes and Application

980019-U